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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/708,519	11/09/2000	Satoru Nippa	2185-480P	1737

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EXAMINER
SHOSHO, CALLIE E

ART UNIT	PAPER NUMBER
1714	14

DATE MAILED: 07/29/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-14

Office Action Summary	Application No.	Applicant(s)	
	09/708,519	NIPPA, SATORU	
	Examiner	Art Unit	
	Callie E. Shosho	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) *3 and 4* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 2* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-4* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 13 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/16/03 has been entered.

Information Disclosure Statement

2. It is noted that JP 60-233139 has been stricken from the IDS filed 6/16/03, Paper No. 13, as redundant given that the reference was already cited on the IDS filed 3/23/01, Paper, No. 5.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1-2, drawn to resin composite, classified in class 524, subclass 437.

II. Claims 3-4, drawn to method for producing a resin composite, classified in class 523, subclass 333.

4. The inventions are distinct, each from the other because:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be

used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as melting the resin, incorporating the aluminum hydroxide, and cooling the mixture to yield a solid composite or mixing a powdered resin with aluminum hydroxide and then compacting the mixture to form a solid composite.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with John Bailey on 1/25/02 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-2.

In the amendment filed 4/15/03, applicant's affirmed their election of Group I, claims 1-2. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Further, claims 3-4 were withdrawn from further consideration by the examiner, 37 CFR 1.142(b) as being drawn to a non-elected invention.

7. Applicants are advised that since Group I, drawn to the product, has been elected, and in the event that the product claims are subsequently found allowable, and further, the withdrawn process claims of group II are amended to depend from or otherwise include all the limitations of

the allowable product claims, then the process claims of Group II will be rejoined with the product of Group I. See MPEP 821.04.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. (U.S. 4,491,553).

Yamada et al. disclose a resin composite comprising a resin such as ethylene/vinyl acetate copolymer, polybutadiene, polyisoprene, polystyrene, and chloroprene rubber and filler such as aluminum hydroxide having average particle diameter of 0.01-50 μm (col.3, lines 13-15 and 66-7, col.5, lines 15-19, 21-22, 35, and 42). Given that the average particle diameter is the size of the aluminum hydroxide based on the particle size distribution of the aluminum hydroxide, and not on agglomerated particles, it is clear that this is equivalent to the primary particle diameter as presently claimed.

Using the specification as a dictionary in order to define the Y/X index (see MPEP 2111.01), it is noted that page 5, lines 20-24 and page 6, lines 1-3 define the index as a measure of the degree of dispersion of the aluminum hydroxide in the resin and that the higher the dispersion degree, the smaller the index. Therefore, although there is no explicit disclosure in

Yamada et al. that the composite has index Y/X of 0.1 or less as presently claimed, given that Yamada et al. disclose that the dispersion of the filler in the resin is very uniform (col.6, lines 19-21) and in light of the definition of the Y/X index as described above, it is clear that the composite of Yamada et al., which possesses high degree of dispersion, i.e. filler is very uniformly dispersed, would inherently possess index Y/X of 0.1 or less as presently claimed.

In light of the above, it is clear that Yamada et al. anticipates the present claims.

Response to Arguments

10. Applicants' filed an after-final amendment as well as a 1.132 declaration on 4/15/03. In the advisory action mailed 4/30/03, examiner stated that the after-final amendment would be entered and responded to both the arguments set forth in the amendment as well as the declaration.

In filing the RCE on 6/16/03, applicants did not address examiner's response to the amendment and declaration filed 4/15/03. Thus, applicants' arguments and examiner's response are re-stated below.

11. Applicant's arguments and 1.132 declaration filed 4/15/03 have been fully considered but they are not persuasive.

Specifically, applicant argues, as well as provides a 1.132 declaration to support the argument, that, contrary to examiner's position, the method of Yamada et al. (U.S. 4,491,553), i.e. mixing in a kneader a resin in particulate form with filler and fibrillatable polytetrafluoroethylene (PTFE) cannot produce resin composite with Y/X index as presently

claimed. In the declaration, a resin composite is made using method of Yamada et al., i.e. mixing in a kneader styrene-butadiene rubber, aluminum hydroxide (AlOH) with average particle diameter of 13 nm, and fibrillatable PTFE. The resin composite formed from such method possesses Y/X index outside the scope of the present claims.

However, it is the examiner's position that applicant's arguments and declaration are not persuasive for the following reasons.

In the declaration, applicant produces resin composite by mixing in a kneader styrene-butadiene rubber, AlOH, and fibrillatable PTFE, which appears to follow the method of example 2 in Yamada et al. However, there appears to be another method disclosed by Yamada et al. Col.5, lines 59-61 and 65-68 of Yamada et al. disclose that the particulate resin and the filler (AlOH), are mixed in the presence of fibrillatable PTFE whereby the resin and filler agglomerate, i.e. aggregate. The agglomerate then forms a resin composite upon further mixing. Further, col.4, lines 58-49 disclose that in one embodiment the PTFE is used in the form of an aqueous emulsion. Additionally, in other examples of Yamada et al. such as examples 3-5, kneading in not required, i.e. "non-kneaded". Thus, given that Yamada et al. disclose mixing aqueous resin emulsion with AlOH to form agglomerate or aggregate which then forms resin composite, which is similar to the method used in the present invention given that no kneading is utilized and the resin composite is formed from agglomeration of resin and AlOH, it follows that such resin composite would also inherently possess Y/X index as presently claimed.

While the declaration discloses that the resin composite of Yamada et al. possesses Y/X index outside the scope of the present claims, this is based on one preferred embodiment of Yamada et al. as set forth in example 2. Other embodiments of Yamada et al. produce the resin

composite by different method as described above including embodiment where PTFE is in the form of an aqueous emulsion. Given that the declaration does not address this other embodiment of Yamada et al. which does not use kneading but rather agglomerates the resin and filler to form resin composite, it is not clear, i.e. no evidence has been provided, that resin composite produced by this other method will also possess Y/X index outside the scope of the present claims. Thus, given that Yamada et al. disclose resin composite comprising resin and aluminum hydroxide wherein the dispersion of the filler in the resin is very uniform, it is the examiner's position that, absent evidence to the contrary, Yamada et al. meets the limitations of the present resin composite claims.

While it is noted that Yamada et al. requires the use of both thermoplastic resin and PTFE, in light of the open language of the present claims, i.e. "comprising", it is clear that the present claims are open to the inclusion of additional ingredients including fibrillatable PTFE as disclosed by Yamada et al. Further, as shown in the Table of applicant's declaration, the use of PTFE does not significantly affect the degree of dispersion of the resin composite.

While page 6, lines 11-22 of the present specification and the declaration show that kneading particulate resin and AlOH does not result in resin composite possessing Y/X index as presently claimed, Yamada et al. also disclose a method wherein kneading is not required but where the resin composite forms by agglomeration.

Further, it is noted that the declaration utilizes PTFE known under the tradename F-104, which is different than any of the PTFE utilized in Yamada et al. (see col.5, lines 25-34). Thus, it is not clear if the PTFE utilized in the declaration is the same as that utilized in Yamada et al.

and if the PTFE are different, what effect, if any, the difference would have on the Y/X index of the resin composite.

Thus, given that Yamada et al. disclose mixing aqueous PTFE emulsion, resin, and AlOH to produce resin composite by agglomeration or aggregation of the resin and AlOH, it is the examiner's position that such resin composite, absent evidence to the contrary, would inherently possess Y/X index as presently claimed.

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP 11228711 discloses polyester film comprising polyester and aluminum hydroxide which has particle size of 1-50 nm, however, there is no disclosure of the degree of dispersion of the aluminum hydroxide in the resin or the index Y/X.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 703-305-0208. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 703-306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

Callie E. Shosho
Primary Examiner
Art Unit 1714

CS
July 25, 2003